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## SOME SENECA CORN-FOODS AND THEIR PREPARATION

By M. R. HARRINGTON

The object in preparing this paper is to set forth the principal native methods of corn preparation still in use among the Seneca Indians, as told me by the people themselves during my various sojourns among them on their reservations in western New York, without any attempt to treat the subject from the historical standpoint or to make a compilation from various authors.

Our earliest evidence of the use of corn among the Iroquois, of whom the Seneca form a part, is found on their ancient village sites, occupied before the white man came; and consists of abundant charred corn, with occasional cobs, husks, and stalks, found in ash-pits and other places favorable to their preservation. Then we have the historical accounts from the early missionaries, traders, and soldiers who passed through the Iroquois territory; and finally the work of more modern students, such as Morgan, writing in 1850, who briefly describes or alludes to several recipes which differ little if at all from those in use to-day.<sup>1</sup> Taking into consideration the nature of the recipes given in this paper, the conservative habits of the Indians, and the facts alluded to above, it is probable that many of them may reach back into prehistoric times.

Several distinct varieties of corn (maize) are commonly used by the Seneca, and I have found at least nine kinds of beans, all claimed by the Indians to be of native origin. Their great staple is *oněñoñ'gän'*,<sup>2</sup> or 'white corn,' sometimes called Tuscarora or "squaw" corn. The ear is often of good size; the grains white, smooth, of dull luster, and rather soft; the taste delicious when eaten green on the cob, cooked as hulled corn, or prepared in the

<sup>1</sup> *Regents' Report on New York State Cabinet of Natural History*, 1850, pp. 73-75.

<sup>2</sup> In transcribing Seneca words I have endeavored to use the Iroquois alphabet published in J. N. B. Hewitt's Iroquoian Cosmology, *Twenty-first Ann. Rep. Bur. Am. Ethnology*, pp. 139-140.

numerous other ways known to Seneca cooking. Similar, but red in color, is *gwěm' dā'*, or *wěm' dā'*, generally used for the same purposes; while another form ripens earlier and bears shorter ears than either the white or red varieties. On account of its frequent dark, almost black, color this is called *oněñ' oñdjī'* ('black corn'). In his article previously referred to Morgan writes of red corn as being used especially for parching in preference to the other soft varieties; but of this I heard nothing among the present Indians.

The fourth variety, *hě'gowā*, or flint corn, while very different from the preceding, is much esteemed by the Indians, who use it for making hominy. It is white or variegated in color, with very hard lustrous grains, while the ears are inclined to be dwarfish. As in the other varieties of corn it is braided into strings by means of the husks shortly after harvesting, and in this form hangs picturesquely from the owner's roof-beams until used. Among the Oneida the husked ears are sometimes kept in a tall egg-shaped storage basket. At the time of some of the more important Iroquois ceremonies one may sometimes see a string of flint corn hung as an offering outside the "long-house" where the dances take place.

The nine or more varieties of beans vary in size from that of a small pea to a large lima bean; in shape some are globular, some flat, some long and cylindrical, some ordinary bean-shape; while in color some are solid blue, others brown or yellow; some are blotched, and others are striped or speckled with reddish or bluish tints. Each variety has its own name, and some are considered especially valuable for certain purposes. One rarely sees beans worked alone; they are usually mixed with corn foods, which fact leads me to mention them here. Fresh wild strawberries, or dried blackberries, elderberries, or huckleberries are often similarly employed to give zest and flavor to hominy or to corn bread.

As one walks about near the "long-house" on any of the reservations, in the vicinity of which the more conservative people like to make their homes, a monotonous hollow thumping is frequently heard—the sound of the Indian grist mill, the great wooden mortar which is one of the most important utensils of every "pagan" family and is frequently found even in the more progres-

sive households. It is a section of a tree trunk of some tough wood and stands about two feet high. In one end a deep symmetrical cavity has been excavated with the aid of fire, and in this the women pound their corn by means of massive four-foot wooden pestles (*hè'tgèn'khā*), preferably of maple. When not in use the *ga'niga'ta'*, as the Indians call the mortar, stands near its owner's door, inverted to keep out the rain and dust. Both mortar and pestle are shown in use in figures 125, 130.

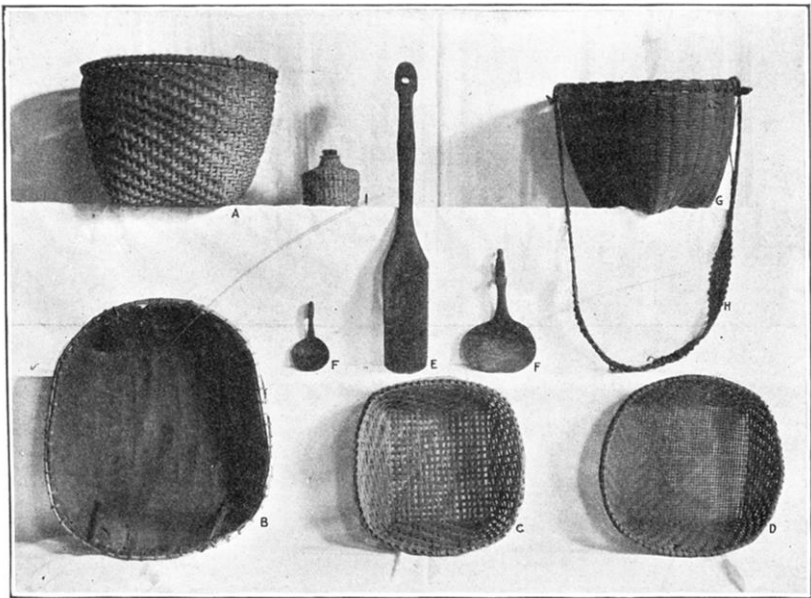


FIG. 123. — Seneca utensils for preparing corn. (A, Hulling basket. B, Elm-bark tray. C, Hominy sieve. D, Meal sieve. E, Stirring paddle. F, F, Ladles. G, Harvest basket. H, Burden strap. I, Salt basket.) Peabody Museum collection.

Another important utensil for corn preparation is the hulling basket, *yegai'doā'thā*, a somewhat cylindrical affair of narrow thick splints well put together, with the bottom of openwork too small to permit a grain of corn to pass through (fig. 123, A). The twilled weave of the sides is not only ornamental but forms a corrugated surface which helps to remove the hulls from the grain in the process to be described later. Figures 128-131 also show the hulling basket.

Two gaps on opposite sides just below the rim usually serve for handles ; but at Tonawanda a regular wooden basket handle is often put in — apparently a modern innovation. A hulling bag of archaic form, used in a similar manner, still survives among the Mohawk of the St Regis and Caughnawaga bands. It is made of three sets of bass-wood bark strips, woven together so as to produce hexagonal openings like those in the seat of a cane-bottom chair, but too small for corn to pass through. The rim of this bag is either a thick hoop of bark fibers firmly bound together, or a hoop of splints.

Of construction similar to the splint-hulling basket, but with low sides, is the hominy sieve basket (fig. 123, c), *oně yústowáněs*, the bottom mesh of which will permit only cracked corn of a certain size to pass through. At Allegheny reservation this is sometimes

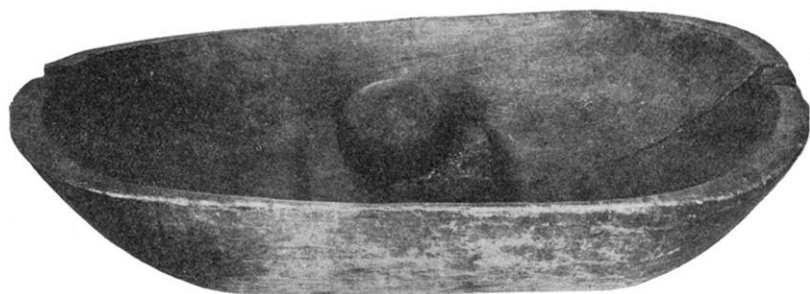


FIG. 124. — Stone corn-crusher with wooden bowl ; Oneida. (Collection of E. T. Tefft.)

made in hexagonal form with a different weave, resembling, although splints are used, that of the Mohawk bark hulling bag just described, which is itself sometimes used as a hominy sieve. Another sieve (fig. 123, d), called *nyo'nyo'sthasā'*, which has now almost universally given place to the ordinary wire article, was made like the first hominy sieve mentioned, only very fine, and was used to sift the corn flour when taken from the mortar, as shown in figure 131. Both sieves may be seen in figures 129 and 130, while in figure 125 the modern wire sieve is shown on the heap of flour in the wooden bowl to the left.

A flat stone slab and a rounded cobble are sometimes used as mortar and poulder for crushing green corn, as will be described later. Probably the shallow stone mortars and cobblestone mul-

lers frequently found on ancient sites sometimes served the same purpose. When in use these stones were placed in the middle of a wooden or bark bowl. In the collection of E. T. Tefft, Esq., of New York City, is a complete set of this kind (fig. 124), comprising bowl, mortar, and muller, collected by the writer from the Oneida Indians, near Oneida, New York. The bowl is of the oval wooden variety, the mortar a rectangular slab measuring about 6 by  $4\frac{1}{2}$  inches, and  $1\frac{3}{4}$  inches in thickness, while the muller is circular, about 4 inches



FIG. 125. — Indian women pounding corn. (Drawn by Jesse Cornplanter.)

in diameter, and resembles those commonly found on Iroquois sites. This has been carefully worked into shape. Both slab and muller show indications of long use. The bark and wooden trays, both called *gā'oh'wā'* in Seneca, were also used for mixing and serving corn bread. The bark tray or bowl (fig. 123, B), now becoming rare, is made of a piece of elm-bark neatly folded at the ends to make a shallow bowl, sometimes round, sometimes long, held firm and rigid

by sewing to a double hoop at the rim. The wooden *ga'on'wā'*, rarer still, is generally oval in shape and usually carved from "cucumber" wood. One of the former may be seen on the mortar in figure 131, while the wooden variety is represented on the stand to the left of figure 125.

Another implement used in the preparation of green corn was the scraper (*yega'so'gāyā'thā'*), made from one of the rami of a deer's lower jaw by simply removing the projecting processes back of the teeth (fig. 126). This was for scraping the corn from the



FIG. 126. — Scraper for green corn; Cayuga.

cob. It is frequently found in ancient Iroquois refuse deposits. Mr A. C. Parker, the State Archeologist of New York, who was the first to bring this implement to the writer's attention, says that corn prepared with its aid is called by a name that signifies "already chewed."

Among the other accessories of corn preparation may be mentioned the *gatgün'iūshā'*, or paddle (fig. 123, E), often used to move the loaves of corn bread when boiling and for stirring corn soup. Plain specimens are shown in figures 127 and 128, but the article is frequently elaborately carved. Broad wooden ladles (fig. 123, F) called *ado'gwashā'*, some very large, some small, with short handles often surmounted by bird or other animal carvings, are used, the former for dishing, the latter for eating some corn foods; and there are still extant a few bark spoons and scoops, and small dishes of elm-bark or wood that doubtless served similar purposes. A bottle-shaped basket called *yedjikhe'dā'kwā'* (fig. 123, I), made of corn-husks by the twining process and furnished with a corn-cob stopper, was used for holding salt in former days, but now has passed nearly out of use. Small wooden salt bowls are sometimes seen.

Corn is still planted from a little basket called *yāndūshinun'dā-*

*khwa'*, slung from the shoulder or tied around the waist by a strip of cloth; and is often harvested in a larger "pack-basket" (fig. 123, G; also shown on the bench in fig. 127), carried by means of a burden

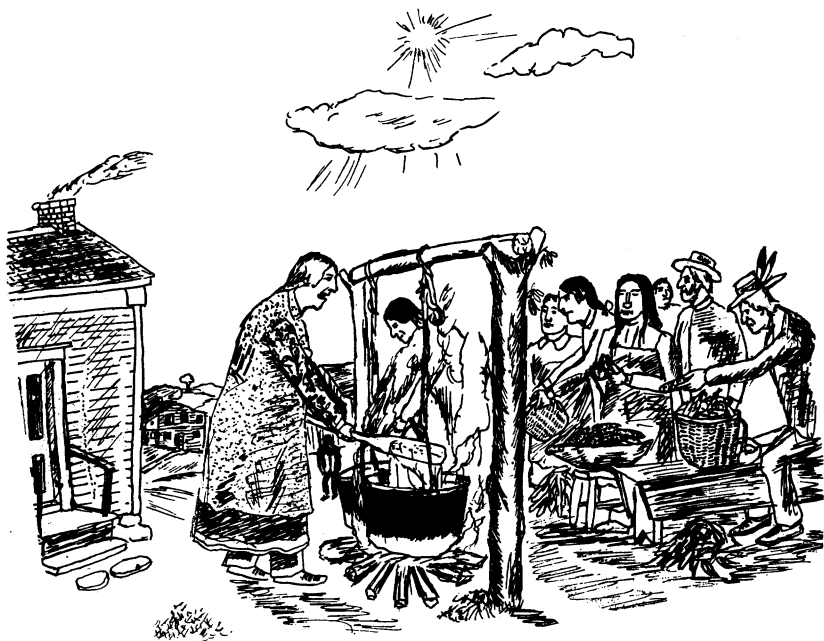


FIG. 127. — Preparing for the Green Corn dance. (Drawn by Jesse Cornplanter.)

strap, *gus' 'hā'* (fig. 123, H), made of slippery-elm bark cord by twining, and passed across the chest, forehead, or shoulder of the harvester. This basket, called *yūntge' dāsthā'*, is usually very well made, with graceful curves, and, especially in the older specimens, with very narrow cross splints on the sides. The long tapering ends of the burden strap are tied through two holes placed near together just below the rim of the basket, generally (at Tonawanda) by means of a special variety of bow-knot.

In a Seneca corn series furnished to the American Museum of Natural History I included a square, low-sided basket tray, made of very broad splints, and used to hold berries and green corn set out to dry in the sun.

All boiling of corn foods is now done in iron kettles (figs. 127, 128) or even tin wash-boilers when it is handiest to use a stove and



FIG. 128.— Seneca woman boiling corn, showing use of paddle, crane, and wooden pot-hook.

there are many to provide for ; but in former days the pot of baked clay prevailed, as may be seen from the thousands of pottery fragments and occasional perfect specimens found on the ancient village sites. Another modern innovation is the substitution of pork for venison and bear meat, and of common for maple sugar, as ingredients for corn foods.

The most popular Indian dish among the Seneca to-day is undoubtedly *o<sup>n</sup>no'kwā'*, or hulled-corn soup. Seldom do the Indians, sagan or Christian, meet for any function, be it a session of the pecret medicine society or a church social, a war-dance or a Sunday afternoon gathering, without a great kettle of *o<sup>n</sup>no'kwā'*, hot and savory, to regale the crowd. Everyone comes provided with a pail or pitcher to "old style" religious dances and ceremonies, knowing that when all is over the pails will be ranged around the great kettle and will be filled, a ladleful at a time, each in turn around the circle until the *o<sup>n</sup>no'kwā'* is exhausted. A stranger boarding with an

Indian family often gets his first notice of a ceremony the night before from the *o'no'kwā'* served at breakfast. The recipes for making this dish vary slightly; but the following, collected at Tonawanda from Mrs Peter Sundown (*Gēh' dē'*), will serve as a model.

A crane is first put up, either three poles leaned together in classical Gypsy style, as shown in figure 128, or more frequently two uprights and a cross-piece arranged as in figure 127. From this a large iron kettle, previously thoroughly scoured, is hung by a chain or by a pot-hook made by twisting the small end of a water-beech sapling into a withe to go over the crane, while the other end, with its projecting stumps of branches, serves as a hook, as shown in the illustrations above referred to. When the water in the kettle begins to bubble, shelled white corn is put in and allowed to simmer until it is well swollen. At this point, sifted hardwood ashes are put in, the proportion being about one quart of ashes to a gallon of water. An old hominy sieve basket is frequently used to sift the ashes. The mass is then boiled until the black pips of



FIG. 129.— Seneca woman washing corn, showing use of hulling basket.

the corn loosen and may be seen floating about in the kettle, and the hull slips easily when the grain is rolled between the fingers. Now comes the work of the hulling basket, into which the mass is poured and allowed to drain; then put into a vessel of fresh water, or a running stream, basket and all, as seen in figure 129, and vigorously shaken and stirred with the paddle until the hulls and pips have floated away and the corn is sufficiently washed.



FIG. 130. — Seneca woman pounding corn for bread. Both kinds of basket-sieve and the hulling basket are shown, besides the mortar and the pestles.

Again the kettle is cleaned, filled with fresh water, and the corn put in and boiled until fairly soft, when it is washed again, removing the last trace of lye. At this stage the hulling process is complete and the corn is ready to be made into either bread or *o<sup>n</sup>no' kwă'*, which latter process will be described first.

During the last part of the process pork or beef has been cooking, and is now combined with the corn, broth and all, and beans added as desired, after which all are cooked together until the meat and beans are done. The result is *o<sup>n</sup>no' kwă'*, or corn soup, which is

then seasoned to taste and eaten — a delicious if troublesome dish. I have known the first boiling, including the lye, to take three-quarters of an hour; the second, half an hour: about an hour and a half in all for the hulling process. A Cattaraugus variant, obtained from Mrs Thomas Silverheels, states that the ashes should be boiled in the water first, and the corn not put in until the water loses its slippery feel and acquires a sharp biting taste. In other respects the formula is the same, except that Mrs Silverheels specifies that while the first boiling ought to be slow, the second should be fast. She is the woman seen in figures 128-131.

Next to *o'no'kwā'* in importance is *gagai'tē<sup>n</sup> oā'kwā'*, or boiled corn bread, whose base is the hulled corn first described. *Gīhī dē'* (Mrs Sundown), my Tonawanda informant, hulls the corn in just the same way for both *o'no'kwā'* and bread, except that she puts the ashes in *before* the corn when making bread, as in the Cattaraugus recipe noted above. Mrs Silverheels makes no distinction between bread and *o'no'kwā'* when hulling corn. Once hulled and washed, the corn is put in the mortar and pounded into flour, as shown in figures 125 and 130. As the work progresses the fine sieve comes frequently into play, as seen in figure 131, and the coarser part put back in the mortar each time to be still further reduced. When the flour has become soft and fine — as nearly as possible under the circumstances — it is placed in a bark or wooden tray (see figures 125 and 131), or, more commonly nowadays, a tin pan, and mixed with hot water until it becomes a thick dough; then the hands are moistened with cold water and used to slightly knead and mold it into discoidal loaves, or "wheels," each about six inches in diameter and two inches thick. Each loaf is then lifted upon the wooden paddle and lowered into boiling water, where it is turned on edge and supported until it becomes firm enough to hold its shape in the bubbling fluid. Three loaves may be cooked at once in a six-quart kettle. The cooking lasts about an hour, or until the loaves show a tendency to leave the bottom of the kettle and float — an indication that they are done. The bread is sliced and eaten hot or cold with meat gravy, maple syrup, or butter, which last is now commonly used by the Indians. Frequently dried huckleberries, blackberries, or elderberries, or, still more

often, beans, are cooked and mixed through the flour before it is moistened, adding much to the flavor of the finished bread. The Cattaraugus recipe from Mrs Silverheels is similar to the above, with the exception that cold instead of hot water is used to moisten the flour before kneading. While boiled bread is of course absolutely heavy and can be eaten only in limited quantities, it has



FIG. 131. — Seneca woman sifting corn flour through fine sieve-basket into a bark tray.

more of the pleasant flavor of corn than any other dish I have ever tasted.

Most popular among the Seneca after *o'no'kwā'* and corn bread is *onon'dā'*, or hominy, an article infinitely superior in taste to anything of the hominy sort that can be bought at the stores. At certain feasts, such as the Strawberry Dance, *onon'dā'* takes the place of *o'no'kwā'*. Flint corn forms its base, and the recipes are the same at both Tonawanda and Cattaraugus. A hominy basket full of shelled flint corn is put in the mortar and moistened with a cup

of cold water ; then the pounding begins, slowly at first, to loosen the hulls, then fast and hard until the corn is broken small enough to go through the coarse sieve basket seen in figure 123, c. It is then shaken in a pan or a bark tray until the hulls come to the top and for the greater part can be removed. From this the corn is thrown into a kettle of boiling water and cooked slowly for about four hours, with frequent stirrings and occasional skimmings to remove the hulls which still come floating up from time to time. At the end of two hours beans are put in, preferably the slender cylindrical yellowish variety, with purple spots, called *dëgáhahad*. For the feast of the Strawberry dance, the wild berries are added somewhat later. The hominy is sometimes sweetened before eating.

Parched corn, or *oshü'wä'*, was in former days a very important article of Iroquois diet ; but at the present time it is used mainly at certain ceremonial functions, such as those of the *Djadego'saso'*, or False-face Company (an Indian society), and but rarely at other times. White corn, or one of its two before-mentioned substitutes, is shelled, shaken in a basket to remove dust and husk chaff, and browned in a hot dry kettle or pan, when it is constantly stirred with the paddle to prevent burning. After this the mortar and fine sieve make short work of reducing it to meal, *oshü'wä'*. In the old times this meal, mixed with maple sugar and carried in a pouch, formed the great staple of warriors and hunters on long marches, on account of its portability, sustaining power, and pleasant flavor. A little *oshü'wä'*, the Indians say, eaten by the side of some spring or brook which could furnish water for mixing and frequent drinks, would give almost the effect of a hearty meal. When used at the False-face functions the parched-corn meal is made into a mush or pudding (*oshü'wä' odj' skwa'*) by stirring it into previously sweetened boiling water, slowly to avoid lumps, and cooking for fifteen or twenty minutes. Not infrequently fried meat with its gravy is added to the mush while cooking ; in which case, I understand, the sweetening may be omitted.

A variant of corn bread, but less frequently used, is *degand'ho"s-dyá'ko'*, or Indian wedding bread, made like the ordinary variety ; but instead of being shaped into the usual round loaves it is molded into the form of two smaller ones, covered and fastened together

wheel-fashion with corn-husks as shown in figure 132, *c*. A number of these are made by the bride's mother at an Indian wedding, and are intended for a sort of feast at which the bride's parents and the young couple eat together. Perhaps the two little loaves bound together were originally symbolic of marriage, but I have no definite evidence on this point.

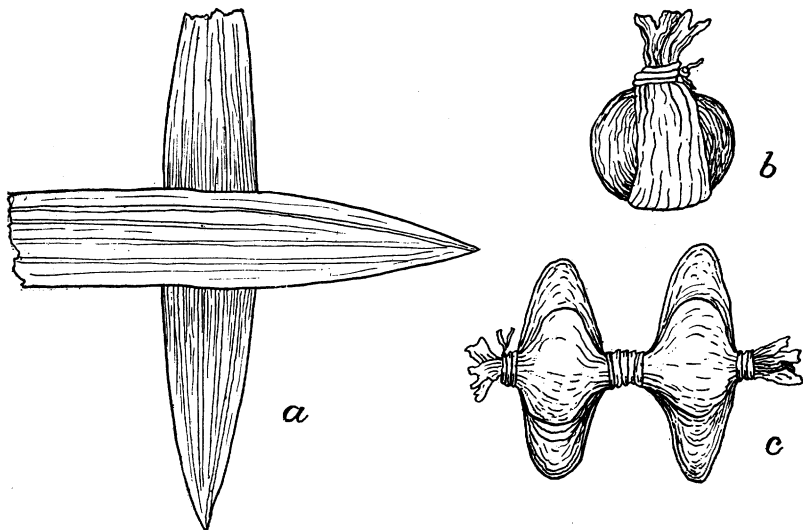


FIG. 132. — *a*, *Onü'tcida'* package of corn-leaves begun. *b*, *Onü'tcida'* package finished. *c*, Wedding-bread package.

Still another variant, now rarely used, is called *ogë<sup>n'</sup> go<sup>n'</sup> ka oä' kwä'*, and is made in the same way as corn bread but without the admixture of beans or berries. When the loaf is shaped, it is placed in a cavity prepared for it in the bed of an open fire, and covered with coals and ashes to bake. I did not learn how long this process takes, nor how the cook knows when the bread is done.

*Ganëo<sup>n'</sup> tē' dō<sup>n'</sup> oä' kwä'* is another very rare form of Indian corn bread, and is the variety most resembling that of the whites. In this case white corn is pounded to a meal in the mortar without previous preparation, and sifted through the fine sieve, then mixed with water and buried in a covered pan among hot ashes until done.

This finishes the recipes obtained for preparing ripe corn; the remaining dishes are made only with green or just ripening grain.

For the first of these, *uista'onon'dā'*, an interesting combination of primitive utensils is used — a large elm-bark or wooden tray in the middle of which is placed a flat stone some eight or ten inches square (fig. 124). As might be expected, the bark tray is now frequently supplanted by a large tin pan. Shelled white corn, just ripe enough to be fairly firm, is crushed on this stone, a few grains at a time, by means of a rounded cobble of proper size to fit easily in the hand. As fast as the grains are crushed they are swept off into the tray until a sufficient quantity is obtained, when they are placed in boiling water with sugar or meat and cooked about half an hour. The meat if used must be pretty well cooked before the corn is put in.

Another green-corn dish is *onū'tcīda'*, made when the corn is somewhat younger than in the last case. After husking, the corn is removed from the cob with the deer-jaw implement before described (fig. 126), the toothed part being used for the rough scraping, the sharp-edged anterior portion for removing the leavings. This was the old style. At the present time the rows of kernels are usually split and shaved off with a knife. Once removed from the cob the corn is then pounded a little in the mortar. Two broad corn leaves are crossed (fig. 132, *a*), and three of the ends drawn together to form a sort of pocket, which is filled with crushed corn and tied into a little package (fig. 132, *b*). Many of these are made and put in hot water to boil half an hour or more, after which they are allowed to cool somewhat, then are opened and eaten with butter, which doubtless takes the place of the fats and oils of earlier times.

A very simple soup is also made by boiling green corn cut or scraped from the cob in a similar manner.

When the *onēñōñgān'*, or white corn, is well in the milk a trench is sometimes dug, about ten feet long, eighteen inches wide, and a foot deep, in which a good fire of small wood is built. Over the ditch near its ends are placed two green cross-pieces of wood, upon which the two lengthwise poles are placed, as shown in figure 133. Against these longitudinal poles are laid many ears of corn to roast, which are kept turning until thoroughly done. Then the kernels are shelled off and dried perfectly hard, sometimes with the aid of the flat basket previously mentioned, and stored in bags until needed. From this roasted dried green corn a dish called *onon'dā' o'no'kwā'* is

prepared by boiling the hardened grain about three-quarters of an hour, then putting in some kind of meat and boiling for an hour or more until done. All this boiling must proceed slowly. The Indians claim that this kind of corn soup is especially good in cold weather.

The last recipe obtained was for a green-corn dish called *ogo'sä' oä'kwä'*, which is prepared as for *onü'tcīda'*, with the exception that the pounded green corn when taken from the mortar is not done up in corn leaves, but is baked brown in a common baking dish placed in the oven of a modern stove, now owned by most of the Indians. The cake is removed from the oven, dried, and broken

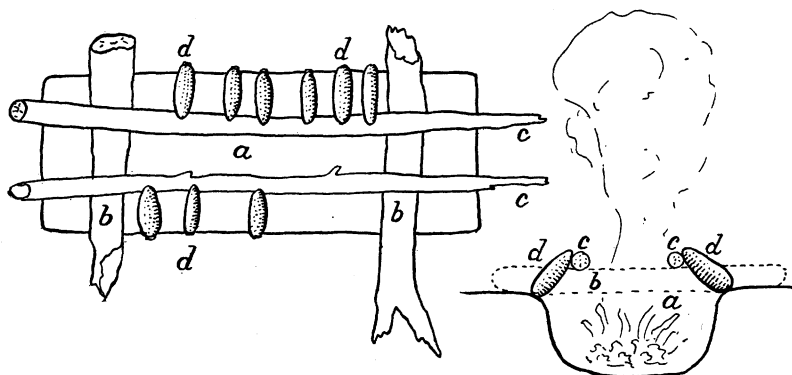


FIG. 133. — Ground-plan and section of roasting pit. (a, Fire-pit. b, Cross-logs to support longitudinal poles. c, Longitudinal poles to support corn. d, Roasting-ears of corn.)

into small pieces, which are stored for future use. When needed the corn is boiled soft and eaten with meat gravy as one would eat beans. This recipe seems at sight to be of modern invention, but a glance at Morgan's article, before mentioned, shows that it was extant in his time, about 1850. It appears that the modern oven baking, however, has supplanted baking in pans or in earthen dishes placed directly on the fire — probably in the ashes.

It cannot be denied, in concluding, that the Iroquois as a people are rapidly discarding what remains of the old life and customs. For this reason it would seem that any remnant of information that may still be obtained, especially when it relates to such an important matter as their ancient use of corn, their great staff of life, and the Indian's best legacy to civilization, is well worth the saving.

NEW YORK CITY.